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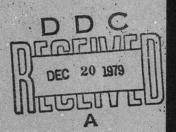
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Civilian and Military Factors as Predictors of Army Failure

NOVEMBER 1960





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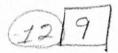
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0 5	CIVILIAN AND MILITARY FACTORS AS PREDICTORS OF ARMY FAILURE

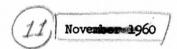
10 Walter A. Klieger and A. U. Dubuisson

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## CIVILIAN AND MILITARY FACTORS AS PREDICTORS OF ARMY FAILURE

#### PURPOSE

The Retention Standards Task was established to develop means for the early identification of enlisted men whose overall cumulative record in the Army is likely to prove unacceptable even though they meet standards for entry into the service.

Current enlistment and induction standards are based primarily upon cognitive measures (e.g., the AFQT and ACB tests) and physical profile. The basic approach of the RETENTION STANDARDS Task seeks to supplement these measures with valid indices principally of a non-cognitive nature, such as background characteristics, personality tests, and character and behavior measures. Since the overall objective of the Task is the development of predictors of failure early in basic training, and ultimately upon entrance into the service, it was deemed worthwhile to study civilian background factors as potential predictors of early failure. Thus, when additional data on a 1953-1954 Basic Training sample (Morton, Goldstein, Houston, and Bayroff, 1957) were collected for the validation of the Basic Military Proficiency Test against type of discharge (Retention Standards Project a-01), a number of civilian background factors were also included. Some of these variables, such as age and medical history, were analyzed along with the Basic Military Proficiency Test under the a-Ol project. However, data on many of the variables were left for analysis in the present exploratory study. The inclusion of a large number of background variables as experimental predictors -- many unlikely to be of predictive value -- would only serve to add unnecessary length to forthcoming projects in the retention area. Results from the present study of the Ft. Leonard Wood data were expected to be of value in selecting those variables most likely to be useful predictors for inclusion in more comprehensive studies of retention.

Another purpose of the present study was to attempt to answer several questions related to the type-of-discharge criterion. For example, how do various discharge categories fit into the criterion? Do men with general discharges resemble those with honorable discharges on behavior indices as opposed to men with dishonorable discharges?

#### SAMPLES

A total of 2209 enlisted men were used for the study. The group entered basic training at Ft. Leonard Wood, Missouri, from September 1953 through October 1954. Criterion and predictor data were collected in 1957. Over 50% of the group were classified as low-mental-level individuals on

the basis of receiving scores below 75 on Aptitude Area III of the ACB. The group was broken down into four basic samples as follows:

1. RA Caucasians

(N = 359)

2. US Caucasians

(N = 1261)

3. RA Negroes

(N = 128)

4. US Negroes

(N = 461)

#### VARIABLES

1. Type-of-discharge

Honorable with no courts-martial
Honorable with courts-martial
General with no courts-martial
General with courts-martial
Undesirable

2. Grade at Discharge

E-1

E-2

E-3

E-4

E-5 and 6

3. Civilian Trade or Occupation

Mechanical

Laborer

Service trade

Farm Laborer

Student

Other

Unemployed or none

- 4. Length of Experience in Months
- 5. Average Weekly Wage

- 6. Convicted of Felony
- 7. Youthful Offender (RA only)
- 8. Imprisoned For Crime (RA only)
- 9. Suspended Sentence (RA only)
- 10. Service Preference
- ll. Marital Status
- 12. Change in Marital Status (During term of service)
- 13. Number of Dependents
- 14. Psychiatric Appraisal ("S" Category of PULHES)
- 15. Number of Physical Complaints of Psychosomatic Nature
- 16. Academic Grade Completed
- 17. Physical Category (PULHES)

## ANALYSIS

The percentage of each sample falling into each discharge category was computed. The results are shown in Table 1. Frequency distributions of grade at discharge and all predictor variables were obtained for the total group by discharge category. The distributions are reported in Table 2.

### RESULTS

P-value splits for the general and unfavorable categories were small for all samples (Table 1). Distribution of grade at discharge, studied as a possible alternative criterion, indicated that most men leaving the Army at the higher grades received honorable discharges, but that among men in the lower grades there was considerable spread over discharge categories. When the predictor variables were distributed within discharge category, the number and percentage of men within many cells were extremely small, particularly in unfavorable categories. For this reason, and because of the disproportionate distribution of mental ability in the group, results were generally more useful in indicating the plausibility of hypotheses than in identifying useful predictors. In the case of all items on preservice disciplinary record, for example, direction of the data indicated that men who enter the Army with some record of law infraction are more likely to receive unfavorable discharges than those whose records are clear. Preservice discipline, then, and other selected background variables, will be included in further Retention Standard studies, perhaps as items in personal history forms.

Table 1
DISTRIBUTION OF TYPE OF DISCHARGE IN THE FOUR SAMPLES AND IN THE TOTAL GROUP

					SA	MPLES				
DISCHARGE CATEGORY	Cauc	ple 1 asian RA	Sample 2 Caucasian US			mple 3 egro RA	Ne	ple 4 gro US	Total	Group
	N	%	N	%	N	%	N	%	N	%
Hon-No CM	2 <b>3</b> 5	65	1170	93	73	57	<b>3</b> 58	78	1836	83
Hon-With CM	65	18	55	4	26	20	<b>5</b> 8	13	204	9
Gen-No CM	12	3	9	1	2	2	11	2	34	2
Gen-With CM	9	3	6	-	5	4	9	2	29	1
Unfavorable	<b>3</b> 8	11	21	2	55	17	2 <b>5</b>	5	106	5
	359	100%	1261	100%	128	100%	461	100%	<u>2200</u>	200%

Table 2

NUMBER AND PERCENTAGE OF MEN WITHIN EACH VARIABLE CATEGORY BY TYPE OF DISCHARGE

	Variable	Hono:	rable %	Hon N	•-CM %	Gen N	eral %	Gen N	-CM %	Un: N	fav.	To N	tal %
2.	Grade												
	E-1 E-2 E-3 E-4 E-5 and 6	33 159 673 889 79	20 56 89 97 100	18 80 74 30	11 28 10 3	3 25 4 2	2 9 1	11 16 2	6	103	61 1 -	168 282 753 921 79	100 100 100 100
<b>5.</b>	Civilian Occupation												
	Mechanical Laborer Service Trade Farm Laborer Student Other	159 621 32 469 73 200	82 78 75 91 82 87	18 94 4 28 9	9 12 9 5 10 7	14 14 16 1 2	2 2 1 1 1	3 14 - 4 2 2	2 1 2 1	10 52 6 8 4 10	5 6 14 2 5 4	194 795 43 515 89 231	100 100 100 100 100
	Unemployed or none	83	84	10	10	ı	1	1	1	4	4	99	100
•	Length of Exp.												
	11 Months or Less 12 Months or	982	82	113	9	22	2	19	2	63		1199	100
•	More Av. Weekly Wage (RA only)	791	85	75	8	10	1	10	1	42	5	928	100
	\$49 or Less \$50 or Hore	190 111	<b>65</b> 60	47 44	16 24	10 3	3 1	9 5	3 3	<b>37</b> 22	13 12	293 185	100 100
•	Convicted of Felony			]									
	Yes No	51 1762	65 84	11 192	14 9	1 33	1 2	3 26	1	13 91	16 4	79 2 <b>1</b> 04	100
•	Youthful Offender (RA only)												
	Yes No	1 67	10 63	4 21	40 19	6	6	1 3	10 3	4 10	40 9	10 107	100 100

Table 2 (Cont)

	Variable	Honor N	able	Hon N	•-CM ≸	Gen N	eral %	Gen N	GenCM N %		nfav.	Total N %	
8.	Imprisoned for Crime (RA only)												
	Yes No	1 302	33 63	88 88	33 19	14	- 3	14	3	1 59	33 12	3 477	100 100
9•	Suspended Sentence (RA only)								!				
	Yes No	304	64	2 89	29 19	14	3	1 13	14 2	4 56	57 12	7 476	100 100
ο.	Service Preference (US only)												
	Army or no Preference Other Services	78 <b>8</b> 222	87 91	68 14	8 6	13	1 2	9	1	30 1	3 -	908 244	100
L.	Marital Status												
	Single Married	1.352 305	86 86	120 27	8 8	17	1 2	17 3	1	59 11	ž	1565 354	100 100
2.	Change in Marital Status												
	Yes No	285 1303	84 87	32 108	9 7	5 20	2 1	1 20	ī	16 52	5 4	339 1503	100 100
5.	No. of Dependents												
	None 1 or more	1329 3 <b>3</b> 8	82 83	145 49	9 12	24 8	2	2 <b>1</b> 5	1	92 10	6	1611 410	100 100
٠.	Psychiatric Appraisal (S of PULHES)												
	Mild transient	1771	83	200	10	31	1	28	ı	104	5	2134	100
	or chronic Disorder	47	84	3	6	3	6	1	2	1	2	55	100

Table 2 (Cont)

	Variable	Honorable N %		HonCM N %		Gen N	General N %		GenCM N %		Unfav. N %		tal %
15.	No. of Phys. Complaints of Psychosomatic Nature												
	2 or Less 3 or More	1228 578	81 89	155 45	10 7	2 <b>3</b> 8	1	25 4	2	93 12	6	1524 647	100 100
16.	Years of Education												
	ll years or Less 12 or More	1191 619	78 96	185 15	12	31 3	2	29	2 -	94 8	6 1	15 <b>3</b> 0 645	100
17.	Physical Category										i		
	Category 1 Other than	1386	83	166	10	25	1	22	1	80	5	1679	100
	Category 1	433	85	37	7	9	2	7	1	25	5	511	100

## REFERENCE

Morton, Mary A., Goldstein, L. G., Houston, T. J., and Bayroff, A. G. Predicting proficiency of enlisted men of limited ability. PRB Technical Research Report 1099. February 1957.